B.Sc II nd sem (Mathematics)

Paper (H-3)

Paper Title: Elementary Abstract Algebra

- 1. A Study of Lagrange's theorem. Normal subgroups and related theorems.
- 2. A Study of Fermat's theorem .Quotient groups and related theorems.
- 3. A Study of Homomorphism and Isomorphism of groups.

Paper (H-4)

Paper Title: Differential Equation, Vector Analysis and Vector Calculus

- 1. A study of Homogeneous Linear ordinary differential equation.
- 2. A study of Scalar and vector product of three vectors.
- 3. A study of Linear differential equations with constant coefficients.

Paper (S-2)

Paper Title: Differential Equation, Vector calculus and Analysis & Elementary

Abstract Algebra

- 1. A Study of Linear differential equations of second order.
- 2. Study of Ordinary simultaneous differential equations.
- 3. A Study of Kernel of homomorphism. Fundamental theorem of homomorphism of groups.

B.Sc IVth sem (Mathematics)

Paper (H-7)

Paper Title: - Partial Differential Equation

- **1.** A Study of Charpit's general methods of solution.
- **2.** A Study of partial differential of second and higher order.
- **3.** A Study of Lagrange's Solution.

Paper (H-8)

Paper Title: - Advanced Differential Equation

- 1. A Study of Power series methods.
- **2.** A Study of Bessel's function and its properties.
- **3.** A Study of Recurrence and generating relations

Paper (S-4)

Paper Title: Partial and Advanced Differential Equation

- **1.** A Study of Partial differential equation of the first order.
- **2.** A Study of Power series methods.
- **3.** A Study of Series solution of differential equations.